

IN THE SPECIFICATION:

Please amend the paragraph beginning at page 15, line 33 as follows:

--For each grid point S_g , the distance to all available satellites or to the strongest satellites SV_i , with $i = 1$ to n , is determined. n is the total number of the considered satellites, equal to at least two in this embodiment of the invention. Based on the determined distance, the time of flight $T_{TOF,i}$ of signals propagating from a respective satellite SV_i to the position of the respective grid point S_g is calculated for each of the satellites SV_i . The time of transmission $T_{TOT,i}$ of the signals received at the GPS receiver 1 from all considered satellites SV_i is known from measurements in the receiving portion 7 of the GPS receiver 1. The time of arrival $T_{TOA,i}$ of the signals from each of the satellites SV_i at the location of the respective grid point S_g is estimated according to the following equation:

$$T_{TOA,i} = T_{TOT,i} + T_{TOF,i}.$$

For each grid point S_g , the matching of the reception time is estimated from all determined times of arrival by estimating the matching error ME according to the following equation:

$$ME = \sum_{\substack{\text{all } i,j \\ i < j}} |T_{TOA,i} - T_{TOA,j}|$$

For the matching error ME, an acceptable threshold value ME_{max} is predefined. If the determined value ME is smaller than the threshold value ME_{max} for a particular grid point S_g , and if the position of the grid point S_g satisfies all other possible conditions, then this grid point S_g is included in a list of all possible solutions S_{list} . The mentioned other possible conditions may be for example a knowledge about the altitude, etc. If such additional information is considered, the position estimate will be more accurate.--.